

IN THE CLAIMS:

Please amend the claims to read as follows:

Claim 1 (Currently Amended) A method comprising:

between a source and a destination, pre-arranging one or more internet connected nodes to transmit a signal from a first node to a second node without a buffering delay and/or a route computation delay for at least one or more predetermined time periods, in order to establish a virtual time multiplexed circuit between said source and said destination, at least in part, to enable bi-directional data communication between said source and said destination;

wherein a particular one of the one or more predetermined time periods is determined based at least in part on a transmission link bandwidth of a particular node, whereby an Internet Time Multiplexed Circuit Connection is established enabling data communications at both ends;

~~, all nodes between source [&] destination at predetermined periods [()the single individual periods of which may be of different time durations at each nodes, due to the different transmission link bandwidths of each nodes()]) are pre-arranged to automatically switch incoming signals to next node without buffering delay/route computation delay, thus establishes a Time Multiplexed Circuit Connection for the whole duration of all the predetermined periods, as in the case where a simplex PSTN dedicated circuit connection has been established.~~

Claim 2. (Canceled).

Claim 3. (New) A system comprising:

a virtual dedicated communication path comprising one or more internet connected nodes, wherein the one or more nodes may be pre-arranged, for one or more periods of time, to transmit a signal from a first node to a second node without a buffering delay and/or a route calculation delay, wherein a particular one of said one or more respective periods of time is determined based at least in part on a transmission link bandwidth of a particular one of the one or more nodes.

Claim 4. (New) The system of claim 3, wherein said virtual dedicated communication path comprises a first unidirectional virtual dedicated circuit and a second unidirectional virtual dedicated circuit.

Claim 5. (New) The system of claim 4, wherein at least one of the unidirectional virtual dedicated circuits is active for a period of time.

Claim 6 (New) A system comprising:

a connection manager capable of connecting a source and a destination at least in part by designating one or more internet connected nodes for transmitting a signal from a first node to a second node without a buffering delay and/or a route calculation delay, at least in part by designating the one or more nodes for transmitting said signal for one or more periods of time, wherein a particular one or the one or more periods of time is determined based at least in part on a transmission link bandwidth of a particular one of the one or more nodes.

Claim 7 (New) The system of claim 6, wherein the designated one or more internet connected nodes comprise a first unidirectional virtual dedicated circuit and a second unidirectional virtual dedicated circuit.

Claim 8. (New) The system of claim 7, wherein at least one of the unidirectional virtual dedicated circuits is active for a period of time.